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[Continued on next page]

(54) Title: IMMUNOGENIC AND THERAPEUTIC COMPOSITIONS FOR *STREPTOCOCCUS PYOGENES*

FIG. 3

Signal sequence ■ Domain 1 □ Domain 2 ■ Domain 3 ■ Domain 4

- aa 1-31 (blue line) correspond to the predicted signal sequence
- aa 1-99 are not present in the Perfringolysin O sequence (see homology above)
- Peptides underlined in black were identified by surform analysis in SF370-M1 (pep1 and pep2) and in 3650-M6 (pep3) strains

- > pep1: 36-QNTASTETTTTNEQPKPESELTEK-61
- > pep2: 155-NINTTPVDISIDSVTDR-172
- > pep3: 450-TEYVETTSTEY-460

(57) Abstract: Compositions for preventing and/or treating *S. pyogenes* infection which comprise one or more active agents. The active agents are SLO antigens, nucleic acid molecules encoding the SLO antigens, and/or antibodies which selectively bind to the SLO antigens.

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1  MSNKKTFKKY SRVAGLLTAA LIIGNLV TAN AESNKQNTAS TETTTTNEQP pep1
51  KPESSELTE KAGQRTDDML NSNDMIKLAP KEMPLSAEK EEKSEDKKK
101  SEEDHTEIN DKYISLNYNE LEVLAKNGET IENFVPKEGV KKADKEIVIE
151  RKKKNITPVDISIDSVT DRTPAALQL ANKGFTENKP DAVVTKRNPQ pep2
201  KIHIDLPQMG DKATVEVNDP TYANVSTAID NLVNQWHDNY SGGNTLPAR
251  KMSKSNVSK SQEELAVNUN ECEMPCVCE DFESEKGER KMLVAKQI
301  FYTVSANLFN NPADVFDKSV TFKELOQKGV SNEAPPLFVS NVAYGRVTP
351  ELKTSKSNQ VEFVSAEAK GQVATNGKVA SPILLNSSFQ AVVGRPAK
401  KLVVWVDEED VERNVZEDN TFSRKNPAYP ISYTSVFLKN NKIAGVNNRT pep3
451  EYVETTSTEY MSCKNLSHQ GAVVAQVETD WDEINVDKQ KEMVTKRWD
501  NNMKSTSPY SWVPELGANS RNRERIMAREG VGLAWETWIK VADERDVKLE
551  KEMVWVSGS QLSFYCSLTYK

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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 2006/042027 A (CHIRON CORPORATION) 20 April 2006 (2006-04-20) page 7, paragraph 43 - page 9, paragraph 50 page 11, paragraph 60 page 14, paragraph 70 - page 18, paragraph 79 page 19, paragraph 87 - page 27, paragraph 110 page 30, paragraph 121 - page 70, paragraph 280; example 5 Tables 1-3; 7, 16; Antigen GAS 25; SEQ ID NOs: 296, 297 claims</p> <p>----- -/--</p>	1-15

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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